**Learning Theory**

**Learning – long term change in behavior resulting from experience**

**Classical conditioning –**

**Pavlov – associative learning**

**US/UCS**

**UR**

**CS**

**CR**

**acquisition**

**generalization**

**discrimination**

**extinction**

**spontaneous recovery**

**delayed conditioning – bell rings, continues to ring, food presented**

**less effective**

**trace conditioning – bell rings, break, food**

**simultaneous conditioning – bell, food together**

**backward conditioning – food then bell (ineffective)**

**John B. Watson – human conditioning (Little Albert)**

**aversive conditioning (pairing of unpleasant stimulus with pleasant stimulus)**

**Higher-order conditioning – first train bell with food, then add light, eventually light alone**

**Learned taste aversions – biological predisposition**

**Garcia & Koelling – conditioned rats an aversion to saccharin water**

**rats did not learn aversions as easily to light, etc.**

**Operant conditioning**

**Law of effect – Thorndike**

**if consequences of behavior are pleasant, connection is strengthened**

**Skinner – expanded research**

**Skinner box**

**Reinforcement**

**positive reinforcer**

**negative reinforcer**

**positive punishment**

**negative punishment (omission training)**

**escape learning**

**avoidance learning**

**shaping**

**chaining**

**primary vs. secondary reinforcers**

**token economy**

**Premack principle – preferred activity can reinforce non-preferred**

**Schedules of reinforcement**

**Continuous**

**Partial (intermittent) reinforcement**

**Fixed ratio**

**Variable ratio**

**Fixed interval**

**Variable interval**

**Instinctive drift – animals tend to drift toward natural behavior**

**Rescorla – contingency model (must see cause-effect relationship)**

**adds cognition – must see predictability of result**

**Observational learning**

**Bandura – modeling (observation & imitation)**

**Latent learning**

**Not effortful – becomes obvious when reward is introduced (Tolman)**

**Abstract learning**

**Generalizing learning**

**Insight learning**

**Kohler – chimps (naturalistic observation)**